

Title (en)

INERTIAL CONE CRUSHER WITH AN UPGRADED DRIVE

Title (de)

TRÄGHEITSKEGELBRECHER MIT EINEM ERWEITERTEN ANTRIEB

Title (fr)

BROYEUR À INERTIE À CÔNES MUNI D'UN ENTRAÎNEMENT MODERNISÉ

Publication

EP 3269452 B1 20190508 (EN)

Application

EP 16765335 A 20160303

Priority

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Abstract (en)

[origin: EP3269452A1] The invention relates to the field of heavy engineering, to crushing and grinding equipment, and more particularly to cone crushers, and may be used in industrial processes of the construction industry and mining and concentrating industry. The crusher comprises body 1 installed on foundation 9 with resilient dampers 10 and having outer cone 2 and inner cone 3 arranged inside outer cone 2. Unbalance weight 6 is arranged on the drive shaft of inner cone 3 with the aid of slide bushing 12. Unbalance weight 6 is installed with its center of gravity adjustable relative to the rotation axis, slide damper 12 of unbalance weight 6 being connected to transmission coupler 13, via which torque from the engine is transmitted. Transmission coupler 13 is provided as a disc coupler comprising a drive half-coupler, a driven half-coupler, and a floating disc arranged between them. The driven half-coupler is rigidly connected to slide bushing 12 of unbalance 6, and the drive half-coupler, to gear wheel 22 rigidly connected to counterbalance weight 11. Furthermore, the drive half-coupler, gear 22 and counterbalance weight 11 are mounted on the slide bushing so that driving half-coupler 27, gear 22, counterbalance weight 11, and the slide bushing form one movable dynamic assembly. The integral movable dynamic assembly is installed with the aid of a mounting disc, on fixed rotation axis 23, which rests upon flange 24 rigidly fixed in the bottom part of body 1 of the crusher. The inertia cone crusher helps to solve the dynamic balance problem, to reduce the height of a crusher, and to increase the crushing degree. 16 depended claims, 7 illustrations.

IPC 8 full level

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